

ABSTRACT:

An interpreter uses a symbol table containing information for resolving symbolic references in instructions. Memory is provided for storing symbolic reference-result associations, the result of the association having resulted from resolving the symbolic reference of the association for an instruction. The memory is organized in groups of locations, each for results for a different category of instructions. During execution of a particular instruction, that group is consulted which is assigned to the category to which the particular instruction belongs. If that group contains an association for the symbolic reference in the particular instruction. If there is such an association, the result from the association is used as operand data for executing the particular instruction. If there is no such association, the particular symbolic reference is resolved by means of the symbol table. The result from said resolving is used as the operand data for executing the particular instruction and an association between the symbolic reference and the result of said resolving is stored in the group assigned to the category of the particular instruction.

Fig. 2